Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Notes Questions for the Unit 2, Part 3 Notes – The Origin and History of Life**

Mrs. Krouse, AP Biology, 2015-2016

***Vocabulary:*** *For each of the terms listed below, fill in the definition given in the notes in the second column. In the third column, I may provide you with a memory trick and/or ask you to break down a term into its parts to better understand its meaning.*

|  |  |  |
| --- | --- | --- |
| **Vocabulary Term and Synonyms** | **Definition(s) Given in the Notes** | **Memory Trick and / or** **Breaking down the Word** |
| Organic Molecule |  | You don’t need to fill in this column for this term ☺ |
| RNA World Hypothesis |  | You don’t need to fill in this column for this term ☺ |
| Organic Soup (aka Primordial Soup) Hypothesis / Theory |  | You don’t need to fill in this column for this term ☺ |
| Iron-Sulfur World Hypothesis / Theory |  | You don’t need to fill in this column for this term ☺ |
| Extraterrestrial Origins Hypothesis / Theory |  | You don’t need to fill in this column for this term ☺ |
| Relative Dating |  | **Breaking Down the Word:** How does “relative” help clarify the meaning of this term? |
| Absolute Dating |  | **Breaking Down the Word:** How does “absolute” help clarify the meaning of this term? |
| Endosymbiosis |  | **Breaking Down the Word:** Look up “endo” and “symbiosis.” How do they help clarify the meaning of this term? |

***Practice Questions:*** *Answer the following questions thoroughly and accurately in complete sentences.*

1. Describe conditions present on early Earth and the composition of early Earth’s atmosphere.

2. What evidence suggests that chloroplasts and mitochondria evolved by endosymbiosis?

3. Describe the methods and results of the Miller-Urey experiment.

4. Place the events in the history of life given below in the correct order.

I. Eukaryotic cells are formed through endosymbiosis

II. Macromolecules (ex: proteins) form through polymerization.

III. The first simple molecules are created from the combination of gases in early Earth’s atmosphere

IV. The first simple cells (aka protocells) are created with a cell membrane surrounding organic molecules suspended in fluid.

V. Multicellular organisms form with specialized cells.